

Description: Students will experience transfer of microorganisms and the possible consequences

Objectives: The students will be able to:

1. Describe and demonstrate proper hand washing technique;
2. Describe the importance of proper hand washing technique in prevention of transmission of pathogens.

Materials:

1. Sink
2. Soap
3. Paper towels
4. UV light
5. Glo-Germ, it is sold by Brevis Corporation at 801-466-6677. This powder medium represents invisible pathogens.
6. Overhead projector

Procedures:

1. Brainstorm ideas about infection control, pathogens, and preventative measures.
(This lesson could introduce a unit on infection control, personal protective devices, etc.)
The importance here is to have students recognize that individual behavior has consequences for many people, and that different organisms are killed by different methods. Discuss the definitions of sterile, clean, decontaminated, etc.
2. Ask previously selected student to dip hands into powder medium representing invisible pathogens.
3. Give students a group task they are comfortable with that involves sharing equipment, paper, pens, etc. Great examples are taking pulse and blood pressure, or working with slides and microscopes. These assume that hand washing will precede activity. Ensure that the student with the medium works with many students.
4. Ask students to go to the area of the UV light, and one by one place hands under the hood. Record the areas of each person's hands that light up and give the record to each student.
5. Discuss results as a group. Discussion questions may include: Who washed their hands initially? Who correctly cleaned equipment between users? What could the consequences be? etc.
6. Provide the definition of nosocomial infections which are infections caused by health care workers or contaminated equipment.